bottom of the burrows once the prey has been seized. The *Collyris* larvae differs in no important particularsfrom the characteristic type, though its habit of living in burrows in wood is sufficiently remarkable. Dr. Koningsberger informs me that he never observed the egg-laying and that he never found any very young larvae, he is unable then to state whether the eggs are laid under bark or on it, and if the young larvae excavates for itself a small burrow which is enlarged as the larva grows in size. Pupation takes place in the burrow. In the Dentchi Entom. Zeitschrift for 1905. p. 172 this Cicindelid is alluded to as herbivorous, but Dr. Koningsberger tells me that this is a mistake, the beetle living on small insects, just like other Cicindelidae. Dr. Koningsberger publishes an all-too brief account of this larva and a poor figure in "Mededeelingen uit 'Slands Plantentuin" XLIV p. 113. fig. 59. (1901). It is much to be hoped that more information will soon be forthcoming about this most interesting form and its allied species. After all it is facts about the life-histories of insects that is wanted now, rather than more dried specimens, and it is a standing reproach to entomologists that so little is known about some quite common tropical insects.

R. SHELFORD.

Nesting of Silk-weaving Ants.

The remarkable habit of the "Karinga" ant (*Oecophylla smaragdina*) in employing its larva as a spinning machine is well known, thanks to the observations of Ridley in Singapore (this journal xxii. 345, (1890-1) and of Holland in Ceylon (Proc. Ent. Soc. London, 1896. p. ix. E.E. Green. On the habits of *Oecophylla smaragdina*). The habit may be mentioned again in order to shew the interest of other observations on another species of ant belonging to a different sub-family. The nest of *Oecophylla smaragdina* is constructed of leaves bound together with a web of silk. If the leaves are torn apart it has been observed that the adult ants immediately repair the breach in the following manner:—several ants hold the separated

edges of the leaves together with their jaws, each ant thus acting as an animated clamp; then come other ants every one holding in its mandibles a larva, the mouth of which is applied first to one edge of the leaf and then to the other; as a filament of slightly glutinous silk is being constantly emitted by the larva, a fine silken web is soon woven by the to and fro movements imparted to it by its bearer the worker ant and the breach in the nest is quickly repaired; the "animated clamps" relax their hold as soon as their need is past. Inasmuch as the worker ant is itself incapable of supplying silk, there seems no doubt but that all the silk of the nest is provided by the larvae. The same habit has been recorded for another species of the same genus, viz. *Oe. longinoda* of the Upper Congo and for *Camponotus senex* of Brazil.

In Notes from the Leyden Museum vol. xxv.. 1905. Father E. Wasman records the observations of Herr Edu. Jacobson at Semarang in Java on the ant *Polyrhachis dives*. The nest is constructed between the leaves of a tree alluded to as the Japanese palm; the leaves are bound together by silk and the interior of the nest is lined with silk in which are entangled chips of bark, wood and fragments of dead leaves; the nest in divided into chambers by partitions of semitransparent silk. Jacobson noted that the nest which he had under observation was broken at one point and that the breach was repaired by the same method as that employed by *Oe. smaragdina*, the larvae held in the jaws of the workers being used to spin a silken web across the rent in the nest. A good many species of *Polyrhachis* employ silk in the manufacture of their nests and it would not be surprising to learn that this habit of the workers of employing the larvae as spinning machines is more general than has been hitherto suspected.

R. Shelford.

Malayan Musical Instruments.

In "Fasciculi Malayenses" Pt. II (*a*) Anthropology, of which a notice is given in "Man" 1904, there is a